REMARKS

Reconsideration of the present application is respectfully requested.

The title stands objected to as being insufficiently descriptive. In response, the Applicants have amended the title of the application as per the Examiners helpful suggestion.

Claim 12 stands rejected under 35 USC §102(b) over Niimi et al. Applicants respectfully assert that it is unfair to give Applicants' preamble absolutely no patentable weight. The MPEP and relevant case law make it clear that a reference must disclose exactly what an Applicant has claimed in order to support a §102(b) rejection. The cited reference flatly can not do so without ignoring explicit wording contained within the claim. In particular, the Niimi et al. reference does not show a ring core encircling a central bore core, as required by Applicants' claims. While it is true that Niimi et al. shows a co-axial relationship between the thing identified as its ring core and the other thing identified as its bore core, that positional relationship is different than the encircling relationship required by Applicants' claims. In other words, co-axial and above is different from encircling. Webster's dictionary defines the term "encircle" to mean "to form a circle around: surround, to pass completely around". Applicants have used that term in accord with its ordinary dictionary definition, and the drawings as originally filed clearly show this encircling relationship. (See e.g., Fig. 5). Because the MPEP and relevant case law require that a reference disclose what an Applicant has claimed, and Niimi et al. does not do this, the §102 rejection should be withdrawn. If there is art available to the Examiner that does show this feature, it should be made of record so that this application can be put in better condition for appeal. The Board's time should not be wasted reaffirming the holdings of relevant case law that forbid the Examiner from applying a meaning to a claim word that contradicts the plain meaning of that word, in order to support a rejection.

Claims 13 and 16-19 stand rejected under 35 USC §103(a) over Niimi et al. Again, Applicants respectfully disagree since Niimi et al. neither shows nor suggests all the features required by Applicants' claims. While it is true that Niimi can be argued to show suspension of a ring shaped core in a mold, it does not do so via a plurality of pillars as required by claim 13, nor does it suggest such a strategy. Therefore, one with ordinary skill in the art reading Niimi et al. as a whole, would be motivated to do the radial support strategy taught by Niimi rather than conjuring up Applicants' pillar support strategy not even contemplated by Niimi et al. Even the

first sentence of the Niimi et al. abstract makes it clear that it explicitly teaches pinching a core piece between mold cavity pieces 22 and 21 in order to support its ring core. To modify Niimi et al. to eliminate this feature, and instead substitute Applicants claimed pillar support, would be a modification against Niimi's expressed teachings. Applicants respectfully insist that the Examiner abide by the mandates of the MPEP and relevant case law in arriving at rejections to Applicants' claims. In other words, the MPEP and relevant case law forbid §103 rejections that require a reference to be modified against its own expressed teachings. Therefore, the outstanding rejection against claim 13 should be withdrawn over and above the reasons set forth with regard to claim 12.

Claim 17 should also be allowable over and above the reasons set forth with regard to claim 12 since it requires machining a plurality of parallelly oriented openings in the casting. And again, Niimi et al. neither shows nor suggests any such methodology. During the telephone interview with the Examiner, the Examiner indicated that the features of claim 17 are well known, and that alone renders the limitations of Applicants' dependent claims obvious. Applicants respectfully demand that the evidence to support the holding of obviousness against Applicants' claims be made of record, or the rejections should be withdrawn. The MPEP and relevant case law require that a reference include some teaching suggestion or incentive for engaging in the modification to arrive and the claimed invention. In this case, the Examiner has identified no teaching suggestion or incentive either inherently, explicitly or implicitly in the Niimi et al. reference to support its being modified to arrive at Applicants' claimed invention. There apparently is no dispute that Niimi does not show the subject matter required by claim 17, but somehow one with ordinary skill in the art would find it obvious to a machine of plurality of parallely oriented openings in the piston casting of Niimi et al., just because the Examiner asserts that someone somewhere has machined parallely oriented openings in some other casting for whatever reason. Such a rejection squarely defies the mandates of the MPEP and relevant case law, and should be withdrawn. Therefore, the Niimi et al. reference alone can not support a prima facia case of obviousness against Applicants' claim 17.

Claim 18 should also be allowable over and above the reasons set forth with regard to claim 12 since it specifically requires that a plurality of check valves be attached at the casting. There should be no dispute that one with ordinary skill in the art would not be motivated to attach check valves to the engine piston casting of Niimi et al. under any normal circumstances,

and certainly Niimi provides no suggestional motivation to do so. Therefore, Niimi et al. again can not by itself present a case of prima facia obviousness against Applicants' claimed methodology. But the Office Action appears to suggest that simply because Applicants have claimed something that could be done, that one with ordinary skill in the art would find it obvious to modify Niimi et al. to do so. But obvious to try has never been the standard under §103, and the Office Action has identified no explicit or implicit or inherent motivation in the cited reference to support these rejections. Therefore, Applicants respectfully request that the outstanding rejection against claim 18 be withdrawn over and above the reasons set forth with regard to claim 12.

Claim 19 should be allowable over and above claim 18 since it specifically requires the machining of conical valve seats in the casting for each of the check valves. Again, there is no evidence of record that shows or suggests this feature of Applicants' claimed methodology. And therefore, Applicants respectfully request that the rejection against claim 19 be withdrawn over and above the reasons set forth with regard to claims 12 and 18.

Applicants respectfully beg the Examiner to withdraw the outstanding rejections, or make evidence of record to support the rejections in a way that would pass muster if this case were to go up on appeal. During the telephone interview, the Examiner suggested that there was more than ample art to support rejections of Applicants' claims, but apparently this art is not yet of record. If there is such art, it should be made of record so that the rejections against Applicants' claims rely upon evidence of record, rather than unsupported assertions from the Examiner. If Applicants are not entitled to the scope of the currently pending claims in any forthcoming patent, the evidence to support that should be of record, but currently is not. Applicants should not be required to pay an additional filing fee to have their claims examined fully based upon some apparently better evidence available to the Examiner, but not yet made of record.

Claims 14, 15 and 20 stand objected to as being dependent upon a rejected base claim. In response, Applicants have amended claims 14 and 20 into independent form. No additional fee is believed required since the claims still includes less than 20 claims and only 3 independent claims. However, the Director is authorized to charge any underpayment or credit any overpayment to Deposit Account Number 500226.

This application is now believed to be in condition for allowance of claims 12-20. However, if the Examiner believes that some minor additional clarification would put this application in even better condition for allowance, the Examiner is invited to contact the undersigned attorney at (812) 333-5355 in order to hasten the prosecution of this application.

Respectfully Submitted

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